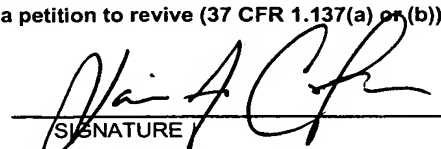


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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 101.0049US/PCT U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>107539144</b>
INTERNATIONAL APPLICATION NO. PCT/GB03/005372	INTERNATIONAL FILING DATE 11 December 2003(11.12.2003)	PRIORITY DATE CLAIMED 20 December 2002 (20.12.2002)
TITLE OF INVENTION <b>System and Method to Minimize Modulation Instability</b>		
APPLICANT(S) FOR DO/EO/US Peter C. Wait, et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: <b>Reply to Invitation to Correct Defects with Corrected Claims; Postcard</b></li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>107539144</b>		INTERNATIONAL APPLICATION NO. PCT/GB03/005372		ATTORNEY'S DOCKET NUMBER 101.0049US/PCT		
The following fees have been submitted				<b>CALCULATIONS</b>	<b>PTO USE ONLY</b>	
21. <input checked="" type="checkbox"/> Basic national fee..... \$300				\$ 300.00		
22. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)..... \$100 All other situations..... \$200				\$ 200.00		
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared and provided to the Office..... \$400 All other situations..... \$500				\$ 400.00		
<b>TOTAL OF 21, 22 and 23 =</b>				<b>\$ 900.00</b>		
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE			
- 100 =	/50 =		x \$250	\$		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$ 130.00		
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$		
Total claims	34 - 20 =	14	x \$ 50	\$ 700.00		
Independent claims	2 - 3 =	-1	x \$200	\$		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$		
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 1,600.00</b>		
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						
<b>SUBTOTAL =</b>				<b>\$</b>		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$		
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 1,600.00</b>		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 40.00		
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 1,640.00</b>		
				Amount to be refunded:	\$	
				Amount to be charged:	\$ 1,640.00	
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed. b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>50-2475</u> in the amount of \$ <u>1,640.00</u> to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>50-2475</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
<b>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</b>						
SEND ALL CORRESPONDENCE TO:  Jaime A. Castano IP Law Department Schlumberger Reservoir Completions 14910 Airline Road Rosharon, Texas 77583						
				 SIGNATURE Jaime A. Castano NAME		
				41,660		
				REGISTRATION NUMBER		

10/539144

JC20 Rec'd PCT/PTO 1 6 JUN 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Peter C. Wait, et al.

Attorney Docket No.: 101.0049US/PCT

Serial No.:

Art Unit:

Filed:

Examiner:

For: SYSTEM AND METHOD TO MINIMIZE MODULATION INSTABILITY

**Mail Stop PCT**

**Commissioner for Patents**

**P.O. Box 1450**


**Alexandria, VA 22313-1450**

**CERTIFICATE OF MAILING**

I hereby certify that the attached patent application, consisting of :

- ☒ Transmittal Letter (1 page),
- ☒ Fee Calculation Sheet (1 page in triplicate),
- ☒ Copy of the International Application as filed with Formal Drawings (17 pages total),
- ☒ Declaration of Inventors Wait and Hartog (8 pages),
- ☒ Recordation Form Cover Sheet (in duplicate) with executed Assignments (6 pages),
- ☒ Power of Attorney (1 page), and
- ☒ Reply to Invitation to Correct Defects in the International Application with corrected claims (8 pages)

is being deposited with the United States Postal Service as Express Mail No. EV 335954964 US in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Rhonda J. Smith

June 16, 2005  
Date

Rhonda J. Smith  
Schlumberger Technology Corporation  
14910 Airline Road  
Rosharon, Texas 77583-1590  
(281) 285-5381  
(281) 285-5537 Fax

10/539144

JC20 Rec'd PCT/PTO 16 JUN 2005

Intellectual Property Department

**Schlumberger**

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Facsimile: 44 (0) 2380 765505

24.02.2004

The Patent Office  
Concept House  
Cardiff Road  
Newport  
S Wales  
NP10 8QQ

**Re: Reply to Invitation to Correct Defects in the International Application**

**PCT Application No.: PCT/GB2003/005372**  
**International Filing Date: 11/12/2003**  
**Title: SYSTEM AND METHOD TO MINIMIZE MODULATION**  
**INSTABILITY**  
**Applicant: Sensor Highway Limited**  
**Our File: 101.0049PCT**

Dear Sirs,

In response to the Invitation to Correct Defects mailed 03 January 2004 (copy attached), Applicant hereby submits the original Power of Attorney forms by Sensor Highway Limited, Peter C. Wait and Arthur H. Hartog.

The Invitation to Correct Defects stated in Annex B1 requires the Applicant to correct the claim numbers since claim number 13 is missing. Enclosed are pages 11 -14 in triplicate with the correct claim numbers. Applicant requests the Receiving Office to replace the previously sent pages 11- 14 with the enclosed corrected pages.

Yours Faithfully



Brian D Stoole  
Agent for the Applicant